

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the matter of:)
Petition for Rulemaking to Allow the MA3)
All-Digital Mode of HD Radio for all AM Stations) RM-11836
Revitalization of the AM Radio Service) MB Docket 13-249

Revitalization of the AM Radio Service

To: The Commission

COMMENTS OF DIGITAL RADIO MONDIALE:

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1.The DRM Consortium is the international not-for-profit organisation whose avowed aim is to promote the Digital Radio Mondiale (DRM) digital audio broadcasting standard. Digital Radio Mondiale™ (DRM) is the universal, openly standardised digital broadcasting system for all broadcasting frequencies.

The DRM standard comprises two major configurations: DRM for large coverage intended for broadcasts on short, medium and long wave up to 30 MHz and providing large coverage areas and low power consumption. The configuration for the VHF bands above 30 MHz called DRM for local coverage is tailored for local and regional coverage with broadcaster-controlled transmissions with up to 3 stereo audio programmes plus multimedia components in half the bandwidth of a single analog FM signal.

All DRM configurations share the same advanced functionality: radio and multimedia services based on the highly efficient audio codec MPEG xHE-AAC and free-to-air Journaline multi-lingual text information, detailed service signalling, service linking (including to analog AM/FM services), Slideshow, EPG, traffic and travel information and DRM EWF – Emergency Warning Functionality.

2.There is another option. The DRM Consortium is encouraged to see that FCC is interested in revitalizing the AM band and AM broadcasts in the USA using the all-digital MA-3 option, currently on the air experimentally on one station only (WWFD, Frederick, Maryland).

We are urging FCC “to take a leap of faith” and allow, alongside the still to be fully proven AM HD, the DRM standard, a well-tested and efficient solution that has the potential to revitalize AM broadcasting, with a quality of sound as good as FM (without any fading, crackling, distortions). DRM was endorsed by ITU in 2002 and offers spectrum compatibility of 9/10, 18/20 kHz bandwidth. DRM is flexible and can offer useful robustness, coverage and transmission power trade-off, as required by the broadcaster. It also benefits from a useful content bit rate of up to up to 72 kbps. Unlike analog MW, DRM offers large area coverage on one single frequency (is spectrum efficient) which makes it good for rural coverage and on the move.

3.DRM and HD can be considered together. We would like the FCC to consider DRM alongside HD as a possible option for migrating from analog to digital radio as a way of revitalising the AM radio band. In fact, the ITU recommends two digital standards for the AM bands – Xperi’s HD Radio™ system and the DRM system in ITU-R Rec. BS.1514.

4. Receivers. Recent developments of multi-standard chips mean that consumers could buy one product, but broadcasters would be able to choose the systems that best meet their requirements for coverage, quality and energy usage. One of the issues facing all digital radio platforms is the cost of receivers compared to that of standard analog units.

For many years it was hoped that one digital standard would be adopted worldwide. This was a Utopian hope as HD, DAB/DAB+/DMB and DRM have already been adopted in various parts of the world with varying degrees of success. The chipset manufacturers were the first to recognize the multi-standard possibilities of digital broadcasting and have managed to produce multi-standard chips to be activated and used as each market demands.

The mass production of multi-standard global receivers for more than one market would greatly reduce the costs to consumers. A “flexible” receiver capable of being used for more than one standard with a selection of all available services and benefits is what the radio manufacturers would aspire to and listeners would benefit from. The SDR receivers we have seen coming out of the USA and India (capable of receiving analog, as well as DRM in all modes, and HD) prove that allowing digital radio to flourish is the way to ensure viability of AM and the growth of radio. And AM, often seen as “old” technology needs all the support it can get from the only two standards that have developed a digital option. Going fully digital is mainly about saving the valuable AM band and not saving a company.

In India there are over 1.5 million cars factory-fitted with DRM MW receivers (as well as analog FM). This figure is impressive as it represents a receiver explosion going from practically zero to almost two million units in less than 18 months. Most of the big car brands in India (also available in the USA) have or are gearing for the DRM MW solution, which has proven to deliver excellent audio and services on the road.

As AM in the USA covers large rural areas, it is worth noting the development of in-car adaptors for DRM that could offer an easy and cheap access to digital radio even when people do not or cannot buy new cars.

5. **Conclusion.** DRM is making significant strides in large and populous countries like India, Indonesia, South Africa, China, Russia etc. DRM works in pure digital or simulcast (without interference), as can be seen or heard daily in many parts of the world. DRM is an open technology and is in no way tied to licensing costs as is HD.

Therefore, while we know that HD is the standard adopted in the USA, allowing DRM to work alongside the already adopted HD standard would provide benefits to the Regulator, to all Broadcasters, big or small and most importantly Listeners.